



Bureau of Air Quality Synthetic Minor Construction Permit

**Preferred Finishing, Inc.
612 Blacksburg Highway
Blacksburg, South Carolina 29702
Cherokee County**

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the 1976 *Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on April 6, 2017, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The construction and subsequent operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: 0600-0071-CD
Issue Date: DRAFT

**Steve McCaslin, P. E., Director
Engineering Services Division
Bureau of Air Quality**

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A. PROJECT DESCRIPTION

This project is for a new Coalescing Filter System, which will be installed to control particulate matter emissions (organic aerosols) from (existing) Tenter Frame #3. The filter system will be installed on (existing) Drying Oven #4 (a component of Tenter Frame #3) to control (organic aerosols) emitted during the drying process of the textile production of a new product. With the addition of the new product, the potential to emit (PTE) now exceeds the major source threshold for PSD for PM, PM₁₀ and PM_{2.5} therefore the facility will have a PSD Avoidance limit of less than 250 tons per year for those pollutants. The PTE also exceeds the major source threshold for Title V for PM₁₀ and PM_{2.5} therefore the facility will also have a Title V Avoidance limit of less than 100 tons per year of PM₁₀ and PM_{2.5} for those pollutants.

B.1 EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
TF3	Tenter Frame #3 (existing)	CD-CF	CF
D4	Dryer #4 with Eight (8) - 0.80 million BTU/hr burners (6.4 million BTU/hr total) (existing)	CD-CF	CF

B.2 CONTROL DEVICES

Control Device ID	Control Device Description	Pollutants Controlled
CD-CF	Coalescing Filter System (new)	PM/PM ₁₀ /PM _{2.5}

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.1	Equipment ID: All Control Device ID: All (S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.
C.2	<p>Equipment ID: TF3 Control Device ID: CD-CF</p> <p>The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.</p>
C.3	<p>Equipment ID: TF3 Control Device ID: CD-CF</p> <p>All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted annually. If no incidences occurred during the reporting period then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.1 Section II.</p>
C.4	<p>Equipment ID: Facility Wide Control Device ID: Facility Wide</p> <p>(S.C. Regulation 61-62.1, Section II.E; S.C. Regulation 61-62.1, Section II.G) This facility is a potential major source for PM, PM₁₀, PM_{2.5} emissions. The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 250 tons per year for total PM, PM₁₀ and PM_{2.5} to avoid PSD and less than 100 tons per year for total PM₁₀ and PM_{2.5} emissions to avoid Title V.</p> <p>The owner/operator shall maintain production records and any other records necessary to determine facility wide PM, PM₁₀, PM_{2.5} emissions. PM, PM₁₀, PM_{2.5} emissions shall be calculated on a monthly basis, and a twelve month rolling sum shall be calculated for total PM, PM₁₀ and PM_{2.5} emissions. Emissions from malfunctions are required to be quantified and included in the calculations. The twelve month rolling sum shall be less than 250 tons for total PM, PM₁₀ and PM_{2.5}</p>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions				
	<p>emissions, less than 100 tons for total PM₁₀ and less than 100 tons for total PM_{2.5}. Reports of the calculated values and the twelve-month rolling sum, calculated for each month in the reporting period, shall be submitted annually.</p> <p>An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.</p>				
C.5	<p>Equipment ID: TF3 Control Device ID: CD-CF</p> <p>S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:</p> <p style="padding-left: 40px;">For process weight rates less than or equal to 30 tons per hour $E = (F) 4.10P^{0.67} \text{ and}$ For process weight rates greater than 30 tons per hour $E = (F) 55.0P^{0.11} - 40$ Where E = the allowable emission rate in pounds per hour P = process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <table border="1"> <thead> <tr> <th>Process/Equipment IDs</th><th>Max Process Weight Rate (ton/hr)</th></tr> </thead> <tbody> <tr> <td>Tenter Frame #3</td><td>1.890</td></tr> </tbody> </table> <p>Operational ranges for the monitored parameters (pressure, temperature) shall be established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. These ranges and supporting documentation (certification from manufacturer, stack test results, 30 days of normal readings, opacity readings, etc.) shall be submitted to the Director of Engineering Services within 180 days of startup of the coalescing filter system. Operating ranges may be updated following submittal to the Department.</p> <p>The owner/operator shall install, operate and maintain pressure drop and temperature gauges on the Coalescing Filter System. Pressure drop and temperature readings shall be recorded daily during source operation.</p> <p>Operation and maintenance checks shall be made on at least a weekly basis for Coalescing Filter</p>	Process/Equipment IDs	Max Process Weight Rate (ton/hr)	Tenter Frame #3	1.890
Process/Equipment IDs	Max Process Weight Rate (ton/hr)				
Tenter Frame #3	1.890				

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<p>System pre-filter section, cooling section, coalescing filters, cleaning systems, oil collection hoppers/bins, and conveying systems for proper operation. A schedule shall be implemented for weekly inspection and regular cleaning or replacement of the coalescing filters. The owner/operator shall establish guidelines for operators to handle opacity problems on all emission units.</p> <p>Records of these events, along with any corrective action taken, shall be maintained in logs (written or electronic) and maintained on site.</p> <p>The Coalescing Filter System shall be in place and operational whenever processes controlled by it are running, except during periods of Coalescing Filter System malfunction or mechanical failure.</p>
C.6	<p>Equipment ID: TF3, D4 Control Device ID: CD-CF</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from this source (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p>

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY - RESERVED

E. HAP - CONDITIONS - RESERVED

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
F.1	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable</p>

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F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
	<p>requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.</p>

G. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the startup date of the source)	Report Due Date
Annual	January-December April-March July-June October-September	January 30 April 30 July 30 October 30
Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.		

H. REPORTING CONDITIONS

Condition Number	Conditions
H.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
H.2	<p>All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address:</p> <p>2600 Bull Street Columbia, SC 29201</p> <p>The contact information for the local Environmental Affairs Regional office can be found at:</p> <p>http://www.scdhec.gov</p>
H.3	The owner/operator shall submit written notification to the Director of Engineering Services of the date construction is commenced, postmarked within 30 days after such date.
H.4	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.

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H. REPORTING CONDITIONS

Condition Number	Conditions
H.5	<p>(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Affairs Regional office within 24 hours after the beginning of the occurrence.</p> <p>The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include, at a minimum, the following:</p> <ol style="list-style-type: none">1. The identity of the stack and/or emission point where the excess emissions occurred;2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;3. The time and duration of excess emissions;4. The identity of the equipment causing the excess emissions;5. The nature and cause of such excess emissions;6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;7. The steps taken to limit the excess emissions; and,8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

I. PERMIT EXPIRATION AND EXTENSION

Condition Number	Conditions
I.1	<p>(S.C. Regulation 61-62.1, Section II.A.4) Approval to construct shall become invalid if construction:</p> <ol style="list-style-type: none">a. is not commenced within 18 months after receipt of such approval;b. is discontinued for a period of 18 months or more; orc. is not completed within a reasonable time as deemed by the Department. <p>The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.</p>
I.2	<p>This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.</p>

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J. PERMIT TO OPERATE

Condition Number	Conditions
J.1	(S.C. Regulation 61-62.1 Section II.F.2) The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department.
J.2	If construction is certified as provided in S.C. Regulation 61-62.1 Section II.F.2, the owner or operator, may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department.
J.3	<p>If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation.</p> <p>Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.</p>
J.4	<p>(S.C. Regulation 61-62.1, Section II.F.3) The owner or operator shall submit a written request to the Director of the Engineering Services for a new or revised operating permit to cover any new or altered source postmarked within 15 days after the actual date of initial startup of each new or altered source.</p> <p>The written request for a new or revised operating permit must include, as a minimum, the following information:</p> <ul style="list-style-type: none">i. A list of sources that were placed into operation.ii. The actual date of initial startup of each new or altered source.

K. GENERAL CONDITIONS

Condition Number	Conditions
K.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
K.2	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or operator may document an emergency situation through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ul style="list-style-type: none">1. An emergency occurred, and the owner or operator can identify the cause(s) of the emergency;2. The permitted source was at the time the emergency occurred being properly operated;3. During the period of the emergency, the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and4. The owner or operator gave a verbal notification of the emergency to the Department within

K. GENERAL CONDITIONS

Condition Number	Conditions
	<p>24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include, at a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.</p> <p>This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>
K.3	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none">1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

L. EMISSIONS INVENTORY REPORTS - RESERVED

ATTACHMENT - Emission Rates for Ambient Air Standards

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The emission rates listed herein are not considered enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Ambient Air Standards Requirements).

AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2						
Emission Point ID	Emission Rates (lbs/hr)					
	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	Lead
EP01	0.018	0.018	0.0009	0.15	0.0315	--
EP02	0.018	0.018	0.0009	0.15	0.0315	--
EP04	0.0617	0.0617	--	--	--	--
EP05	0.018	0.018	0.0009	0.15	0.0315	--
EP06	0.0822	0.0822	0.036	0.84	0.21	--
EP07	0.0822	0.0822	0.036	0.84	0.21	--
EP08	0.0514	0.0514	0.00225	0.525	0.131	--
EP09	0.0514	0.0514	0.00225	0.525	0.131	--
EP10	0.0514	0.0514	0.00225	0.525	0.131	--
EP11	0.0514	0.0514	0.00225	0.525	0.131	--
EDO-1	0.037	0.037	--	--	--	--
TF3 – Dryer #3	0.042	0.042	0.003	0.549	0.461	--
CF	0.989	0.955	0.004	0.627	0.527	--

TOXIC AIR POLLUTANTS – STANDARD NO. 8					
Emission Point ID	Emission Rates (lbs/hr)				
	Acrylamide 79-06-1	Ethylene Glycol 107-21-1	Formaldehyde 50-00-0	Mineral Oil 8012-95-1	--
EP01	0.0000378	0.0455	0.0058	--	--
EP02	0.0000378	0.0455	0.0058	--	--
EP03	--	--	--	0.065	--
EP05	0.0000678	0.0455	0.0058	--	--
EP06	0.00005	0.0681	0.00085	--	--
EP07	0.00005	0.0681	0.00085	--	--
EP08	0.000025	0.03405	0.000425	--	--
EP09	0.000025	0.03405	0.000425	--	--
EP10	0.000025	0.03405	0.000425	--	--
EP11	0.000025	0.03405	0.000425	--	--
EP12	--	--	--	0.065	--

ATTACHMENT - Emission Rates for Ambient Air Standards

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TOXIC AIR POLLUTANTS – STANDARD NO. 8					
Emission Point ID	Emission Rates (lbs/hr)				
	Acrylamide 79-06-1	Ethylene Glycol 107-21-1	Formaldehyde 50-00-0	Mineral Oil 8012-95-1	--
EP13	--	--	--	0.065	--
TF3	--	--	0.056	--	--

TOXIC AIR POLLUTANTS – STANDARD NO. 8				
Emission Point ID	Emission Rates (lbs/hr)			
	Hydrochloric Acid	Styrene	--	--
	7647-01-0	100-42-5	--	--
EP06, 07, 08, 09, 10, 11	--	0.525	--	--
TF3	--	0.011	--	--
CF	0.066	--	--	--